--An adenovirus vector containing a hypoxia response element (HRE) was generated. CN796, an adenovirus vector in which E1A is under the control of a composite TRE consisting of an HRE and a PSA-TRE, was made by co-transfecting CN515 with pBHG10. CN515 was constructed by inserting a 67 base pair fragment from HRE eno1 (Jiang et al. (1997) *Cancer Research* 57:5328-5335) into CN65 at the BglII site. CN65 is a plasmid containing an enhancer and promoter from the human PSA gene, consisting of an enhancer from -5322 to -3738 fused to a PSA promoter from -541 to +12. This is the PSA-TRE contained within plasmid CN706. Rodriguez et al. (1997) *Cancer Res.* 57:2559-2563.--

IN THE CLAIMS

Please replace the pending claims with the correspondingly numbered claims below. Claims amended herein are noted by the text in parentheses.

Cancel claims 2-7, 9-13, 17-20, 22-23 and 27-31.

1. **(amended)** A replication-competent adenovirus vector comprising, a hypoxia responsive element (HRE) operably linked to an adenovirus gene essential for replication selected from the group consisting of E1A, E1B and E4, wherein said HRE comprises a binding site for hypoxia inducible factor-1.

8. **(amended)** The adenovirus vector of claim 1, wherein the HRE is human.

14. **(amended)** The adenovirus vector of claim 1, wherein said adenovirus gene essential for replication is operably linked to a composite regulatory element comprising said HRE and a cell-type specific transcriptional regulatory element (TRE).

15. **(amended)** The adenovirus vector of claim 14, wherein said cell type-specific TRE comprises a promoter.

16. **(amended)** The adenovirus vector of claim 14, wherein said cell type-specific TRE comprises an enhancer.

B9

21. **(amended)** The adenovirus vector of claim 14, wherein said cell type-specific TRE comprises a prostate specific promoter and enhancer.

Sub F1

24. **(amended)** A composition comprising:

a replication-competent adenovirus vector comprising a hypoxia responsive element (HRE) operably linked to an adenovirus gene essential for replication selected from the group consisting of E1A, E1B and E4, wherein said HRE comprises a binding site for hypoxia inducible factor-1; and

a pharmaceutically acceptable excipient.

B10

25. **(amended)** An isolated host cell comprising the adenovirus vector of claim 1.

26. **(amended)** A method of propagating adenovirus *in vitro,* the method comprising:

introducing into a cell an adenovirus vector comprising a hypoxia responsive element (HRE) operably linked to an adenovirus gene essential for replication selected from the group consisting of E1A, E1B and E4, wherein said HRE comprises a binding site for hypoxia inducible factor-1 wherein said cell is maintained under hypoxic conditions *in vitro*, thereby expressing said adenovirus gene essential for replication;

wherein said adenovirus is propagated.

Add the following new claims:

--32. **(new)** The method of Claim 26, wherein said propagating of said adenovirus is cytotoxic to said cell.

33. **(new)** The method of Claim 32, wherein said cell is a tumor cell.

B11

34. **(new)** The adenovirus vector of claim 14, wherein said cell-type specific transcriptional regulatory element (TRE) is selected from the group consisting of a prostate-specific TRE (PSA-TRE), a glandular kallikrein-1 TRE (*hKLK2*-TRE), a probasin TRE (*PB*-TRE), an α-fetoprotein TRE (AFP TRE) and a carcinoembryonic antigen TRE (CEA TRE).--

REMARKS

In view of the above amendments and the following remarks, the Examiner is respectfully to allow claims 1, 8, 14-16, 21, 24-26, and 32-34, the currently pending claims. Claims 2-7, 9-13, 17-